

Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

TITLE V/SYNTHETIC MINOR DRAFT PERMIT NO. V-05-014
PUBLISHERS PRINTING COMPANY-LEBANON JUNCTION FACILITY
LEBANON JUNCTION, KY.
June 2, 2005
FROUGH SHERWANI, PE
Plant I.D. #021-029-00032
AI# 470
ACTIVITY # APE20050001

A. SOURCE DESCRIPTION:

Publishers Printing Company is an offset lithographic paper printing plant which prints magazines. Printing takes place on 14 existing offset lithographic presses each with a natural gas fired dryer and propane as a back up fuel. The source is proposing to add one press EP # 13 (Press 416) and removed two presses (Press 408 and 413) with the renewal of their Title V permit (V-99-033 Revision 2). Overall, the source will have a total 13 presses. Insignificant activities consist of a 30,000 gallon propane tank, five natural gas/propane space heaters, six chillers with cooling towers, five ink jet head cleaning stations, five hot melt magazine binding gluers, maintenance activities of the presses which consist of surface preparation for maintenance painting and a maintenance paint spray booth, a scrap paper collection system, two natural gas fired boilers with propane as backup and a cold solvent cleaner using mineral spirits as the cleaning agent.

The presses are not subject to a process specific regulation. However, the VOC emissions from Presses EP 8 (409), EP 9 (411), and EP 7 (410) have synthetic minor limits to preclude PSD review based on earlier determinations. The portion of Bullitt County where the plant is located was designated as an attainment for ozone.

Proposed Construction:

On January 7, 2005, the source has applied to the Division for Air Quality to construct a new press EP 13 (Press 416). The uncontrolled potential to emit is 127.00 tons per year. On June 15, 2004 Bullitt County was designated as a non-attainment area for ozone. Therefore, the facility has opted to take a voluntary VOC limit to preclude the applicability of 401 KAR 51:052, Review of new sources in or impacting upon non-attainment areas.

B. COMMENTS:

1. Type of Control and Efficiency:

EP 14(EP1) Thermal Oxidizer

(Interlock MEGTEC System Cleanswitch CS-300-95-HT)

Maximum rate capacity of the burner: 3.46 MMBtu/hr (Natural Gas)

Secondary Fuel: Propane

Destruction Efficiency: 95% (Tested on September 28, 2004)

The thermal Oxidizer controls the emission from EP1 (Press 402), EP 2 (Press 401), EP 3 (Press 404), EP 4 (Press 406), EP 5(Press 405), EP 6(Press 407) EP 7(Press 411), EP 8(Press 409), EP 9 (Press 410), EP 10 (Press 412), and proposed EP 13 (Press 416).

EP 15 (EP2) Catalytic Oxidizer

(Magnum 8000 Meg TEC System)

Maximum rate capacity of the burner: 4.0 MMBtu/hr (Natural Gas)

Secondary Fuel Propane

Destruction Efficiency: 95% ((Tested on September 28, 2004)

The catalytic Oxidizer controls the emission from EP11 (Press 414), and EP 12 (Press 415).

2. Emission factors and their Source:

Emissions from the offset lithographic presses were calculated using the EPA document "Control of Volatile Organic Compound Emissions from Offset Lithographic Printing". Emissions from the dryers/Thermal Oxidizer/Catalytic Oxidizer were calculated using AP42.

3 Applicable regulations:

401 KAR 50:012, General application.

401 KAR 63:020; Potentially hazardous matter or toxic substances

4. Precluded Regulations:

401 KAR 51:017, Prevention of significant deterioration of air quality.

401 KAR 51:052. Review of new sources in or impacting upon non-attainment areas (June 15, 2004).

C. EMISSIONS AND OPERATING CAPS DESCRIPTION:

1. VOC emissions from EP 8 (Press 409) shall not equal or exceed 36 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
2. VOC emissions from EP 9 (Press 410) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
3. VOC emissions from Press EP 7 (411) shall not equal or exceed 20 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality.
4. VOC emissions from Press EP 13 (416) shall not equal or exceed 10 tons/yr based on a 12 month rolling total to preclude applicability of 401 KAR 51:052, Review of new sources in or impacting upon non attainment areas.
5. The RAP (reasonable, available, and practical) control equipments requirement required under 401 KAR 50:012, General application for a 95% VOC destruction efficiency by the thermal oxidizer controlling each press' dryer exhaust.
6. The RAP (reasonable, available, and practical) control equipment required under 401 KAR 50:012, General application for Press 414 and 415 is a 95% VOC destruction efficiency by the catalytic oxidizer controlling each press' dryer exhaust.

D. PERIODIC MONITORING:

1. The permit requires monthly records of material usage and emissions to demonstrate compliance with the 12 month emission limitations.
2. The 95% VOC destruction efficiency by the catalytic oxidizer shall be demonstrated again during the life of the permit.
3. The 95% VOC destruction efficiency by the thermal oxidizer shall be demonstrated as per general condition G (d) (5).

E. CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.